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EXAMINER

TM02/0525

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 13

Serial Number: 09/215,752
Filing Date: December 18, 1998
Appellant(s): Nuxoll et al.

Stephen R. Tkacs
For Appellant

EXAMINER'S ANSWER

This is in response to Appellant's brief on appeal filed on 5-16-2001.

(1) REAL PARTY IN INTEREST

The Examiner acknowledges Applicant's identification of the real party in interest as International Business Machines Corporation.

(2) RELATED APPEALS AND INTERFERENCES

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) STATUS OF CLAIMS

The statement of the status of claims contained in the brief is correct.

Examiner's Answer - Paper #13

(4) STATUS OF AMENDMENTS

The appellant's statement of the status of amendments after final rejection contained in the brief is correct. After-final amendment C (paper #9) was entered to correct an improper dependency problem with claim 34, which previously depended upon itself.

(5) SUMMARY OF INVENTION

The summary of invention contained in the brief is correct.

(6) ISSUES

The appellant's statement of the issues in the brief is correct.

(7) GROUPING OF THE CLAIMS

The Examiner accepts the grouping of the claims.

(8) CLAIMS APPEALED

The copy of the appealed claims contained in the appendix to the brief is correct.

9) PRIOR ART OF RECORD

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

Maruyama et al. (U.S. Patent 5,710,920).

(10) NO NEW PRIOR ART

No new prior art has been applied in this Examiner's answer.

(11) GROUNDS OF REJECTION

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 5, 7, 10, 13, 14, 16, 18-20, 22, 24-35, 37, 40, 42, 46 are rejected under 35 U.S.C. § 102(e) as being anticipated by Maruyama et al. (U.S. Patent 5,710,920).

As per independent claims 1, 13, 19, 42:

Maruyama teaches a method in a software component for processing a data object in a data processing system, the method comprising the computer-implemented steps of:

- sending a query for a meta definition of a data object [e.g., step 1001, fig. 13, col. 9, lines 37- 45],
- receiving the meta definition of the data object [e.g., col. 9, line 45].
- identifying object attributes in the meta definition [e.g., col. 9, lines 45-64] , line].
- prompting a user to input data values corresponding to the object attributes [e.g., col. 9, line 38].

As per independent claims 7, 16, 22, 35, 46:

Maruyama teaches a method in a software component for processing a data object in a data processing system, the method comprising the computer-implemented steps of:

- receiving a data value stream [e.g., col. 9, also figs. 12 & 13].
- sending a query for a meta definition of a data object [e.g., step 1001, fig. 13, col. 9, lines 37- 45],
- receiving the meta definition of the data object [e.g., col. 9, line 45].
- mapping data values to a data structure according to the attributes in the meta definition of the data object [e.g., col. 9, lines 45- 64].

As per claims 2, 14, 20, 37:

Maruyama teaches determining an object type of a data object, before querying for a meta definition for the data object [e.g., col. 3, see discussion beginning line 11, meta definition discussion begins line 61].

As per claims 5, 40:

Maruyama teaches the query for the meta definition for the data object is sent to a Meta Data Service [e.g., step 1001, fig. 13, col. 9, lines 37- 45, col. 3].

As per claims 18, 24:

Maruyama teaches at least one object attribute in the meta definition of the data object [e.g., col. 3, discussion beginning line 11, col. 5, see discussion beginning line 4].

As per claim 10:

Maruyama teaches the software component is a Meta Data Service.
[e.g., see discussion columns 3 & 4].

As per claim 26:

Maruyama teaches the step of prompting the user for data values comprises: matching the meta definition to graphical user interface fields; and presenting the graphical user interface fields to the user [e.g., col. 7, lines 60-65, col. 9, line 5, line 39].

As per claims 27, 28, 32, 33:

Maruyama teaches the data structure is a database and transferring the data values to the data structure. [fig. 1, database 107].

As per claims 29, 34:

Maruyama teaches the database is a relational database [e.g., col. 3, lines 5-7].

As per claims 25, 30:

Maruyama teaches means for receiving inputted data values corresponding to the object attributes from the user; and means for sending a data value stream including the inputted data values to a server [e.g., col. 7, lines 60-65, col. 9, line 5, line 39].

As per claim 31:

Maruyama teaches the prompting means comprises: means for matching the meta definition to graphical user interface fields; and means for presenting the graphical user interface fields to the user [e.g., col. 7, lines 60-65, col. 9, line 5, line 39].

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 6 & 41 are rejected under 35 U.S.C. § 103 as being unpatentable over Maruyama et al. (U.S. Patent 5,710,920) in view of well known prior art.

As per claims 6, 41:

Maruyama discloses the invention substantially as claimed, as discussed above.

However, **Maruyama** does not *explicitly* teach the use of a cache.

“Official Notice” is taken that the use of caches is well known in the art [M.P.E.P. 2144.03].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Maruyama** by implementing the improvements detailed above because it would provide **Maruyama's** system with the enhanced capability of improving performance.

Claims are 36, 43, & 47 rejected under 35 U.S.C. § 103 as being unpatentable over Maruyama et al. (U.S. Patent 5,710,920) in view of well known prior art.

As per claims 36, 43, 47:

Maruyama discloses the invention substantially as claimed, as discussed above.

However, **Maruyama** does not *explicitly* teach the use of Persistent Objects and associated services.

“Official Notice” is taken that the use of persistent objects and associated services is well known in the art [M.P.E.P. 2144.03].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Maruyama** by implementing the improvements detailed above because it would provide **Maruyama's** system with the enhanced capability of persistent data storage.

Claims 4, 11, 12, 38, 39, 44, & 45 are rejected under 35 U.S.C. § 103 as being unpatentable over Maruyama et al. (U.S. Patent 5,710,920) in view of well known prior art.

As per claims 4, 11, 12, 38, 39, 44, 45:

Maruyama discloses the invention substantially as claimed, as discussed above.

However, **Maruyama** does not *explicitly* teach the use of clients and servers. **Maruyama** does teach the use of multiple computers in an object database system [e.g., col. 6, lines 23, 61]

“Official Notice” is taken that the use of clients and servers is notoriously well known in the art [M.P.E.P. 2144.03].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Maruyama** by implementing the improvements detailed above because it would provide a distributed object database system.

As per claim 12:

See the rejection of claim 6.

(12) NEW GROUND OF REJECTION

This Examiner's answer does not contain any new ground of rejection.

(13) RESPONSE TO ARGUMENT

- Re: Appellant's arguments:

Appellant argues that *Maruyama* does not teach the features of the present invention that "concern separating the meta data from application code within a distributed data processing system" [brief, page 5, line 1].

Examiner's response:

- Appellant is arguing limitations that are not claimed. The Examiner notes that a "distributed data processing system" is not claimed; rather, a broader "data processing system" is what is actually claimed within the preamble of each independent claim. Claimed subject matter, not the specification is the measure of the invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. See *In re Self*, 213 USPQ 1,5 (CCPA 1982); *In re Priest*, 199 USPQ 11, 15 (CCPA 1978).

- Appellant argues that *Maruyama* does not teach "identifying attributes in the meta definition" and "prompting a user to input data values corresponding to object attributes" [brief, page 5, last paragraph].

Examiner's response:

The Examiner has applied a broad, but reasonable interpretation, to the claimed meta definition and object "attributes." The Examiner notes that the term "meta data" is widely used in the art to broadly denote "data about data." "Object Attributes" reasonably and broadly denote any data or variable associated with an object. "Object Attributes" are explicitly disclosed by *Maruyama* [e.g., see discussion beginning col. 3, line 11]. By Appellant's own admission, *Maruyama* "teaches an object-oriented database in which an

object may be changed in terms of attribute, relation, and procedure, independently of schema,” and *Maruyama* teaches that “Meta data is stored in a database for objects in the object-oriented database” [brief, page 8, last paragraph].

“Meta definition information” is explicitly disclosed by *Maruyama* [e.g., see discussion beginning col. 3, line 29, also same column, line 61; also see col. 4, line 10, line 24, line 43, line 60; also see col. 5, line 4, line 17, line 29]. *Maruyama* teaches user interaction with the view manager 101 wherein the user supplies a command and data [e.g., see discussion beginning col. 3, lines 44-47], such interaction inherently displaying command and data entry fields that prompt the user for input, as is routinely implemented in computer user interfaces, as taught by *Maruyama*.

The Examiner has a *duty* and *responsibility* to the public and to Applicant to interpret the claims *as broadly as reasonably possible* during prosecution. *In re Prater*, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969). For the reasons detailed above, the Examiner maintains that the generic terms “meta data” and “meta definition” and “object attribute” are reasonably subject to a broad interpretation and that *Maruyama* does teach the claimed limitations as detailed in the rejections copied above.

- Appellant argues that *Maruyama* does not teach where “an application receives an object in a soft format (data value stream) and queries a Meta Data Service for the meta definition. [brief, page 7, first paragraph]. The Examiner notes that a “soft format” is not claimed, and that a data value stream can be reasonably and broadly interpreted to be any transfer of data between software components.

- Appellant argues that *Maruyama* does not teach the claimed Meta Data Service [brief, page 9, first line].

Examiner’s response:

Appellant concedes that *Maruyama* does teach that Meta Data is stored in a database for objects in the object-oriented database [brief, page 8, last paragraph]. Again, the Examiner notes that the term “meta data” is widely used in the art to broadly denote “data about data.”

In response to any remaining points of argument not specifically addressed above, the

Examiner has considered Appellant's arguments, and in response restates the rejections set forth in the last office action, as copied above.

- Appellant argues that the instant invention as claimed would not have been obvious in light of the prior art of record.

Examiner's response:

The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991).

MPEP § 2143.01 requires that the suggestion or motivation to combine references must be found in the references themselves, OR, in the knowledge generally available to one of ordinary skill in the art. The proper test for the relevance of a cited combination of references is: "whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention," In re Gorman, 933 F.2d at 986, 18 USPQ2d at 1888. Subject matter is unpatentable under section 103 if " 'would have been obvious ... to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or prior art specifically suggest making the combination." In re Nilssen, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988). Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and the use of that teaching to solve the same [or] similar problem which it addresses. In re Wood, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979). "In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found in a specific reference." In re Oetiker, 24 USPQ2d 1443 (CAFC 1992).

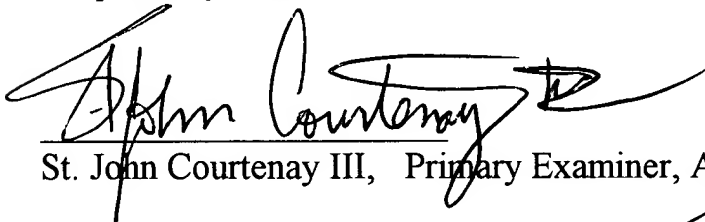
In addition, the Examiner notes that Appellant failed to seasonably challenge the Examiner's taking of "Official Notice," pursuant to the requirements set forth under MPEP §2144.03. A "seasonable challenge" is an explicit demand for evidence set forth by Applicant in the next response. Accordingly, the claim limitations the Examiner considered as "well known" in the

office action are now established as admitted prior art of record for the course of the prosecution.

In response to Appellant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. In re McLaughlin, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



St. John Courtenay III, Primary Examiner, Art Unit 2151

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Tuesday, May 22, 2001